

Product Highlights

High Performance

Gigabit access ports and 10 Gigabit uplinks provide high bandwidth connections for clients, servers, and storage

Flexible Software

Upgradeable software image provides a flexible approach to software management

High Availability

Up to 9 physical switches can be stacked to create a single virtual switch, providing fault tolerance and increasing network reliability





DGS-3630 Series

Layer 3 Stackable Managed Gigabit Switches

Features

High Availability and Flexibility

- 20/44 10/100/1000BASE-T ports or 20 SFP ports
- 4 Combo 10/100/1000BASE-T/SFP ports
- 4 10-Gigabit SFP+ uplink ports
- Switch Resource Management (SRM) for flexible management of system resources
- · 6 kV surge protection on all RJ45 access ports

Reliability

- Redundant Power Supply (RPS) support
- IEEE 802.1D/802.1w/802.1s Spanning Tree
- Loopback Detection (LBD)
- Ethernet Ring Protection Switching (ERPS)

High Bandwidth Stacking

- Physical stacking up to 9 units, 432 GbE ports
- · Supports long-distance stacking over fiber
- · 80 Gbps per device physical stacking bandwidth

Operations, Administration and Maintenance

- IEEE 802.3ah Ethernet First Mile (EFM)
- IEEE 802.1ag/ITU-T Y.1731 OAM

Easy Management

- RJ45/mini-USB console port
- · Management and alarm ports
- · USB port for firmware and configuration files
- Easy-to-use web GUI
- Industry standard CLI

Overview

The DGS-3630 Series Layer 3 Stackable Managed Switches are designed for Small Medium Businesses (SMBs), Small Medium Enterprises (SMEs), larger Enterprises, and ISPs. They deliver high performance, flexibility, fault tolerance, and advanced software features for maximum return on investment. With Gigabit Ethernet RJ45 and SFP ports, 10 GbE SFP+ ports, advanced security features, and advanced Quality of Service (QoS), the DGS-3630 Series can act as core, distribution or access layer switches. High port densities, switch stacking, and easy management make the DGS-3630 Series suitable for a variety of applications.

Standard and Enhanced Software Images

The DGS-3630 Series switches include the Standard Image (SI) software, and for additional functionality, they may be upgraded to Enhanced Image (EI) with a separately ordered license upgrade. The Standard Image provides core SMB and SME functionality, such as L2 switching, entry-level routing, L2 multicast, advanced QoS, Operations, Administration, and Maintenance (OAM), and robust security features. The Enhanced Image includes all the features from the Standard Image, and also supports full L3 routing for Enterprise integration, including OSPF, BGP, VRF-Lite and L3 multicast.

This approach allows I.T. managers to deploy a lower cost L2/L2+ solution today, and upgrade to a L3 solution in the future if networking needs change and a full dynamic routing solution is required.

High Availability and Flexibility

The DGS-3630 Series switches support stacking technology, which combines multiple switches to form a single physical or virtual stack. This increases



redundancy over multiple physical units, simplifies management, and provides a single IP address to manage all members in the stack. Up to 9 switches can be stacked using Direct Attach Copper (DAC) or fiber optic cables to make up to 432 Gigabit Ethernet ports available, allowing switching capacity to be increased with demand. The Switch Resource Management (SRM) feature allows the hardware table size to be changed, so that switch functions can be optimized based on the use of the switch. There are 3 modes: IP Mode, LAN Mode, and L2 VPN Mode, which modify the size of the Layer 2 and 3 tables for optimum efficiency.

Security, Performance and Availability

The DGS-3630 Series switches provide a complete set of security features including multi-layer Access Control Lists (ACLs) and 802.1X user authentication via TACACS+ and RADIUS. The DGS-3630 switches also offer extensive VLAN support, including GVRP and 802.1Q VLAN to enhance security and performance. A robust set of QoS features help ensure that critical network services such as Voice over IP and video conferencing are given high priority through the network. The D-Link Safeguard Engine increases the switches' reliability, serviceability, and availability by preventing malicious flooding traffic caused by worms or virus attacks.

D-Link Green Technology

The DGS-3630 Series switches feature D-Link Green technology, which includes a power-saving mode, smart fan feature, reduced

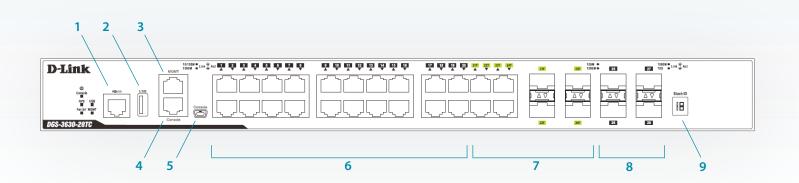
heat dissipation, and cable length detection. The power-saving feature automatically powers down ports that have no link or link partner, and ensures that LEDs are shut off when not needed. The smart fan³ feature allows for the built-in fans to automatically turn on only at a certain temperature, providing continuous, reliable, and ecofriendly operation of the switch.

Versatile Management

The DGS-3630 Series switches can be managed by the D-Link Network Assistant Utility, an industry-standard Command Line Interface (CLI), and an intuitive web-based Graphical User Interface (GUI) that enables administrators to set up and remotely manage their networks. Support for SNMP allows centralized management of a large number of devices, and out-of-band management is available via a dedicated console port. A mini-USB console port allows the DGS-3630 Series switches to be managed without any extra connectors, and a USB Type A port can be used to store logs, configuration, and firmware images. The DHCP auto-configuration and auto-image features can also be used to deploy multiple switches automatically, saving costs with larger deployments.

Lifetime Warranty and NBD Replacement

D-Link offers a Lifetime Warranty and Next Business Day (NBD) hardware replacement on the DGS-3630 Series of Layer 3 Stackable Managed Gigabit Switches to further its commitment to product quality and long-term customer confidence..



1 Alarm	RJ45 (8 pins) port provides external	alarm detection.
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2 USB USB 2.0 Type-A port provides additional storage space for portable firmware images and configuration
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3 MGMT RJ45 Management port. IP-based, 10/100/1000 Out-of-Band port for Telnet, web, or SNMP management. Can be used to configure the switch without being connected to the network.

4 Console RJ45 console port. Used to connect to the switch CLI for configuration, management, and monitoring. Special console cable (included) with DB9 interface connects the switch to the PC serial port (COM).

5 Console Mini-USB console port. Can be used to connect to the switch CLI for configuration, management, and monitoring.

6 Gigabit Ports Depends on model: 20 x 10/100/1000 RJ45, 44 x 10/100/1000 RJ45 ports, or 20 x 100/1000 SFP ports.

7 Combo Ports 4 Combo ports. Can either operate as RJ45 (10/100/1000) ports or SFP (100/1000) ports.

8 10GbE Ports 4 SFP/SFP+ ports can operate at 1 Gbps and 10 Gbps speeds. Used for uplinks/stacking.

9 Stack ID Displays Switch stacking number.



Technical Specifications			
	DGS-3630-28TC	DGS-3630-28SC	DGS-3630-52TC

General			
Interfaces:			
• 10/100/1000BASE-T Ports	20	_	44
• Gigabit SFP Ports	_	20	_
• Combo Ports (10/100/1000BASE-T or SFP)	4	4	4
• 10 Gigabit SFP+ Ports	4	4	4
Console Port	RJ45 and Mini	USB console ports for out-of-band CLI	management
Management Port	10/100/1000B/	ASE-T RJ45 Ethernet for out-of-band IP	management
Alarm Port	RJ45	RJ45	RJ45
USB Port	USB 2.0 Type A	USB 2.0 Type A	USB 2.0 Type A
Optional Redundant Power Supply	DPS-500A	DPS-500A	DPS-500A
Performance			
Switch Capacity	128 Gbps	128 Gbps	176 Gbps
Packet Forwarding Rate	95.24 Mpps	95.24 Mpps	130.95 Mpps
Packet Buffer	4 MBytes	4 MBytes	4 MBytes
MAC Address Table	68K entries ²	68K entries ²	68K entries ²
IPv4 Routing Table	16K entries	16K entries	16K entries
IPv6 Routing Table	7K entries	7K entries	7K entries
IPv4 Forwarding Table	32K entries ²	32K entries ²	32K entries ²
IPv6 Forwarding Table	16K entries ²	16K entries ²	16K entries ²
Jumbo Frame Size	12 KBytes	12 KBytes	12 KBytes
Physical and Environmental			
MTBF	300,190 hours	280,612 hours	263,936 hours
Acoustics	52.7 dB(A)	56 dB(A)	53.9 dB(A)
Heat Dissipation	145 BTU/hr	217 BTU/hr	212 BTU/hr
Power Input		100 to 240 VAC, 50/60 Hz	
Max Power Consumption	42.4 W	63.6 W	62.0 W
Standby Power Consumption	28.1 W	30.1 W	36.0 W
Dimensions	17.4 x 10.2 x 1.73 inches (441 x 260 x 44 mm)		
Weight	8.25 lbs (3.74 kg)	8.36 lbs (3.79 kg)	8.91 lbs (4.04kg)



Ventilation	2 Smart Fans³
Operating Temperature	23°F to 122°F (-5°C to 50°C)
Storage Temperature	-40°F to 158°F (-40°C to 70°C)
Operating Humidity	10% to 95% RH
Storage Humidity	5% to 95% RH
Safety Certifications	cUL, CB, CE, CCC, BSMI
EMI/EMC	CE, FCC Class A, C-Tick, VCCI, BSMI, CCC

Standard Image (SI)		
Stackability	Physical stacking • Up to 80G stacking bandwidth • Up to 9 switches in a stack • Ring/chain topology support	Virtual Stacking/clustering of up to 32 units • Supports D-Link single IP Management • Up to 20 Gbps stacking bandwidth
L2 Features	MAC Address Table: up to 68K entries² Flow Control • 802.3x Flow Control when using Full Duplex • HOL Blocking Prevention Spanning Tree Protocol • 802.1D STP • 802.1w RSTP • 802.1s MSTP • Root Guard • Loop Guard Jumbo Frame: up to 12 KBytes 802.1AX Link Aggregation • Max. 32 groups per device, 8 ports per group	ERPS (Ethernet Ring Protection Switching) version 2 Port Mirroring
VLAN	802.1Q 802.1v Protocol-based VLAN Double VLAN (Q-in-Q) • Port-based Q-in-Q • Selective Q-in-Q Port-based VLAN MAC-based VLAN Subnet-based VLAN Private VLAN	VLAN Group • Max. 4K VLAN groups • Max. 4094 VIDs Multicast VLAN (ISM VLAN for IPv4/IPv6) Voice VLAN Auto Surveillance VLAN VLAN Trunking GVRP: Up to 4K dynamic VLANs Asymmetric VLAN
L2 Multicast	MLD Snooping • MLD v1/v2 Snooping • Supports up to 4K MLD groups ² • Host-based MLD Snooping Fast Leave • Supports 64 static MLD groups • MLD Snooping Querier • Per VLAN MLD Snooping • MLD Proxy Reporting	IGMP Snooping • IGMP v1/v2/v3 • Supports up to 8K MLD groups ² • Supports 64 static IGMP groups • Per VLAN IGMP Snooping • IGMP Snooping Querier • Host-based IGMP Snooping Fast Leave PIM Snooping
L3 Features	IPv4 ARP/IPv6 ND: support up to 32K/16K ² • 512 Static ARP Gratuitous ARP IP Interface • Supports 256 interfaces Loopback Interface Proxy ARP • Support local ARP proxy	IPv6 Tunneling • Static • ISATAP • GRE • 6to4 VRRP v2/v3 IP Helper



L3 Routing	Supports 16K hardware routing entries shared by IPv4/IPv6 1 entry consumed by each IPv4 route 2 entries consumed by each IPv6 route Supports up to 32K hardware L3 forwarding entries shared by IPv4/IPv62 1 entry consumed by each IPv4 route 2 entries consumed by each IPv6 route Static Route Max. 512 IPv4 entries Max. 256 IPv6 entries IPv4/IPv6 Default Route	PBR (Policy-based Route) Null Route Route Preference Route Redistribution Graceful Restart (GR) Helper BFD (Bidirectional Forwarding Detection) • IPv4/v6 Static Route • RIP • VRRP RIPv1/v2/ng
L3 Mulitcast	IGMP/MLD Filtering	
QoS (Quality of Service)	802.1p 8 queues per port Queue Handling • Strict Priority (SP) • Weighted Round Robin (WRR) • Strict + WRR • Weighted Deficit Round Robin (WDRR) Congestion Control • Weighted Random Early Detection (WRED) 802.1Qbb Priority-based Flow Control (PFC) for 10 GbE port Bandwidth Control • Port-based (Ingress/Egress, min. granularity 8 Kb/s) • Flow-based (Ingress/Egress, min. granularity 8 Kb/s) • Per queue bandwidth control (min. granularity 8 Kb/s) Policy Map • Remark 802.1p priority • Remark IP precedence/DSCP • Time based QoS	CoS based on: Switch Port Inner/ outer 802.1p Priority Inner/ outer VID MAC address Ether Type IP address ToS/IP Preference DSCP Protocol Type TCP/UDP port IPv6 Traffic Class IPv6 Flow Label Three Color Marker trTCM
ACL (Access Control List)	ACL based on: • 802.1p priority • VID • MAC address • EtherType • LLC • VLAN • IP address • IP preference/ToS • DSCP mask • Protocol type • TCP/UDP port number • IPv6 Traffic Class • IPv6 Flow Label	Max. ACL entries: Ingress (hardware entries): 4K Egress (hardware entries): 1K VLAN Access Map Numbers: 3K Time-based ACL
Green	Energy Effeciency Ethernet (EEE) Power Saving By Link Status Power Saving By Cable Length	Power Saving By LED Shut-Off Power Saving By Port Shut-Off Power Saving By System Hibernation
Security	Port Security Supports up to 12K MAC addresses per port/VLAN/system Broadcast/Multicast/Unicast Storm Control D-Link Safeguard Engine DHCP Server Screening Dynamic ARP Inspection IP Source Guard DHCP Snooping IPv6 Snooping Dynamic ARP Inspection (DAI) DHCPv6 Guard IPv6 Route Advertisement (RA) Guard IPv6 ND Inspection Duplicate Address Detection (DAD)	ARP Spoofing Prevention • Max. 64 entries L3 Control Packet Filtering Unicast Reverse Path Forwarding (URPF) Traffic Segmentation SSL • Supports TLS 1.0/1.1 • Supports IPv4/IPv6 access SSH • Supports IPv4/IPv6 access BPDU Attack Prevention DOS Attack Prevention NetBIOS/NetBEUI filtering



AAA	802.1X Authentication Supports Port/Host-based access control Identity-driven Policy Assignment Dynamic VLAN Assignment Bandwidth Control Assignment ACL Assignment Web-based Access Control (WAC) Supports Port/Host-based access control Identity-driven Policy Assignment Dynamic VLAN Assignment Bandwidth Control Assignment ACL Assignment Support IPv4/IPv6 access Support HTTPS Compound Authentication	MAC-based Access Control (MAC) • Supports Port/Host-based access control • Identity-driven Policy Assignment • Dynamic VLAN Assignment • Bandwidth Control Assignment • ACL Assignment Guest VLAN Microsoft® NAP • Support 802.1X NAP • Support DHCP NAP Privilege Level for Management Access RAIDUS and TACACS+ Authentication Authentication Database Failover RADIUS/TACACS+ Accounting
OAM (Operations, Administration and Maintenance)	Cable Diagnostics 802.3ah Ethernet Link OAM D-Link Unidirectional Link Detection (DULD) Dying gasp	802.1ag Connectivity Fault Management (CFM) Y.1731 OAM Optical Transceiver Digital Diagnostic Monitoring (DDM)
Management	NTPv3/v4 Precision Time Protocol (PTP) Web-based GUI Support IPv4/IPv6 access Support SSL (HTTPS) Command Line Interface (CLI) Telnet Server for IPv4/IPv6 access Telnet Client for IPv4/IPv6 SNMP Support v1/v2c/v3 Support IPv4/IPv6 access SNMP Trap TFTP Client for IPv4/IPv6 FTP Client for IPv4/IPv6 FTP Client for IPv4/IPv6 IPv4 SFTP Server RCP System Log for IPv4/IPv6 Syslog Server SMTP RMONv1 Supports 1,2,3,9 groups RMONv2 Supports ProbeConfig group	Command Logging LLDP/LLDP-MED D-Link Discover Protocol (DDP) DHCP Client option 12 DHCP Auto-configuration DHCP Auto-image DHCP Relay option 60/61/62/18/37/125 DHCP/DHCPv6 Local Relay DHCP Server • Support IPv4/IPv6 address assignment DHCPv6 Prefix Delegation (PD) Multiple Images/ Multiple Configurations DNS Relay for IPv4/IPv6 DNS Client for IPv4/IPv6 Debug Command Password Recovery/ Encryption Ping/ Traceroute for IPv4/IPv6 Microsoft® Network Load Balancing (NLB) Switch Resource Management (SRM) sFlow D-Link License Management System (DLMS)
Enhanced Image (EI		
VLAN L3 Routing	Super VLAN BGP BGPv4/v4+ 4bytes AS Text/MD5 for BGPv4 VRF-Lite IPv4 Static Route RIPv1/v2 OSPFv2 BGPv4	Bidirectional Forwarding Detection (BFD) for OSPF OSPF OSPF v2/v3 OSPF passive interface Stub/NSSA area OSPF equal cost route Text/MD5 for OSPFv2
L3 Mulitcast	IGMPv1/v2/v3 MLDv1/v2 IGMP/MLD Proxy DVMRPv3	PIM-DM/SM/SSM/SDM SSM Mapping for IPv4/IPv6 Multicast Source Discovery Protocol (MSDP)



MIB/IETF Standards		
	• RFC1065, RFC1066, RFC1155, RFC1156, RFC2578 MIB	• RFC4293 IPv6 SNMP Mgmt Interface MIB
	Structure	• DDM MIB (D-Link MIB)
	RFC1212 Concise MIB Definitions	Private MIB
	• RFC1213 MIBII	MIB for D-Link Zone Defense
	RFC1215 MIB Traps Convention	• DDP MIB
	• RFC1493, RFC4188 Bridge MIB	• LLDP-MED MIB
	• RFC1157, RFC2571, RFC2572, RFC2573, RFC2574,	• RFC791 IP
	RFC2575, RFC2576 SNMP MIB	• RFC768 UDP
	• RFC1442, RFC1901, RFC1902, RFC1903, RFC1904,	• RFC793 TCP
	RFC1905, RFC1906, RFC1907, RFC1908, RFC2578,	• RFC792 ICMPv4
	RFC3418, RFC3636 SNMPv2 MIB	• RFC2463, RFC4443 ICMPv6
	• RFC271, RFC1757, RFC2819 RMON MIB	• RFC826 ARP
	• RFC2021 RMONv2 MIB	• RFC1338, RFC1519 CIDR
	• RFC1398, RFC1643, RFC1650, RFC2358, RFC2665,	 RFC2474, RFC3168, RFC3260 Definition of the DS Field in
	RFC3635 Ether-like MIB	the IPv4 and IPv6 Headers
	• RFC2668 802.3 MAU MIB	 RFC1321, RFC2284, RFC2865, RFC2716, RFC1759,
	• RFC2674, RFC4363 802.1p MIB	RFC3580, RFC3748 Extensible Authentication Protocol
	Interface Group MIB	(EAP)
	RFC2618 RADIUS Authentication Client MIB	RFC2571 SNMP Framework
	• RFC4022 MIB for TCP	 RFC2572 SNMP Message Processing and Dispatching
	• RFC4113 MIB for UDP	RFC2573 SNMP Applications
	RFC2620 RADIUS Accounting Client MIB	 RFC2574 User-based Security Model for SNMPv3
	• RFC2925 Ping & TRACEROUTE MIB	 RFC1981 Path MTU Discovery for IPv6
	• TFTP uploads and downloads (D-Link MIB)	• RFC2460 IPv6
	• Trap MIB (D-Link MIB)	 RFC2461, RFC4861 Neighbor Discovery for IPv6
	• RFC4293 IPv6 MIB	 RFC2462, RFC4862 IPv6 Stateless Address Auto-
	• RFC4293 ICMPv6 MIB	configuration
	• Entity MIB	 RFC2464 IPv6 over Ethernet and definition
	• RIPv2 MIB	RFC2767 Dual Stack Hosts using the 'Bump-In-the-Stack'
	• OSPF MIB	Technology
	• IPv4 Multicast Routing MIB	 RFC3513, RFC4291 IPv6 Addressing Architecture
	• PIM MIB for IPv4	RFC2893, RFC4213 IPv4/IPv6 dual stack function
	IP Forwarding Table MIB	 RFC3484 Default Address Selection for Internet Protocol version 6

Ordering Information		
Model Number	Description	Warranty
DGS-3630-28TC/SI	20 10/100/1000BASE-T ports + 4 Combo 10/100/1000BASE-T/SFP ports + 4 10 GbE SFP+ ports L3 Stackable Managed Switch with Standard Image ¹	Lifetime
DGS-3630-28SC/SI	20 SFP ports + 4 Combo 10/100/1000BASE-T/SFP ports + 4 10 GbE SFP+ ports L3 Stackable Managed Switch with Standard Image ¹	Lifetime
DGS-3630-52TC/SI	44 10/100/1000BASE-T ports + 4 Combo 10/100/1000BASE-T/SFP ports + 4 10 GbE SFP+ ports L3 Stackable Managed Switch with Standard Image ¹	Lifetime
Optional License Upgrades		
DGS-3630-28TC-SE-LIC	DGS-3630-28TC Standard Image to Enhanced Image Upgrade License	
DGS-3630-28TC-SE-LIC	DGS-3630-28SC Standard Image to Enhanced Image Upgrade License	
DGS-3630-28TC-SE-LIC	DGS-3630-52TC Standard Image to Enhanced Image Upgrade License	

Optional 10 Gpbs SFP+ Optical Transceivers			
DEM-431XT-DD	10GBASE-SR Transceiver, DDM, 80/300M		
DEM-432XT-DD	10GBASE-LR Transceiver, DDM, 10KM		
DEM-435XT-DD	10GBASE-LRM Transciver, DDM, 220M		
Optional 1 Gpbs SFP Op	otical Transceivers		
DGS-712	1000BASE-T SFP Transceiver		
DEM-310GT	1000BASE-LX SFP Transceiver, 10KM		
DEM-311GT	1000BASE-SX SFP Transceiver, up to 550M		
Optional 10 Gpbs Direc	Optional 10 Gpbs Direct Attach Copper (DAC) Cables		
DEM-CB100S	1M (40") 10G Direct Attach Cable for Data/Stacking		
DEM-CB300S	3M (118") 10G Direct Attach Cable for Data/Stacking		
Optional Redundant Po	Optional Redundant Power Supply		
DPS-500A	Redundant Power Supply Unit, 140 Watt RPSU		
Optional Management	Software		
DV-700	D-View 7 Network Management System		
DV-700-N25-LIC	D-View 7 NMS - 25 Node License Upgrade		
DV-700-N50-LIC	D-View 7 NMS - 50 Node License Upgrade		
DV-700-N100-LIC	D-View 7 NMS - 100 Node License Upgrade		
DV-700-N250-LIC	D-View 7 NMS - 250 Node License Upgrade		
DV-700-N500-LIC	D-View 7 NMS - 500 Node License Upgrade		
DV-700-N1000-LIC	D-View 7 NMS - 1000 Node License Upgrade		
DV-700-P5-LIC	D-View 7 NMS - 5 Probe License Upgrade		
DV-700-P25-LIC	D-View 7 NMS - 25 Probe License Upgrade		

¹ Stacking cable and USB flash card not included.

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DGS-3630_REVA_DATASHEET_1.00_EN_US.PDF

For more information

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All references to speed are for comparison purposes only. Product specifications, size and shape are subject to change without notice, and actual product appearance may differ from that depoited herein.

Visit us.dlink.com for more details.



² Based on maximum value of Switch Resource Management (SRM).

³ By default, the fan speed is low. When the temperature inside the chassis is over 36°C, the fans switch to high speed until the temperature drops below 33°C.

⁴ Limited Lifetime Warranty available in USA only.